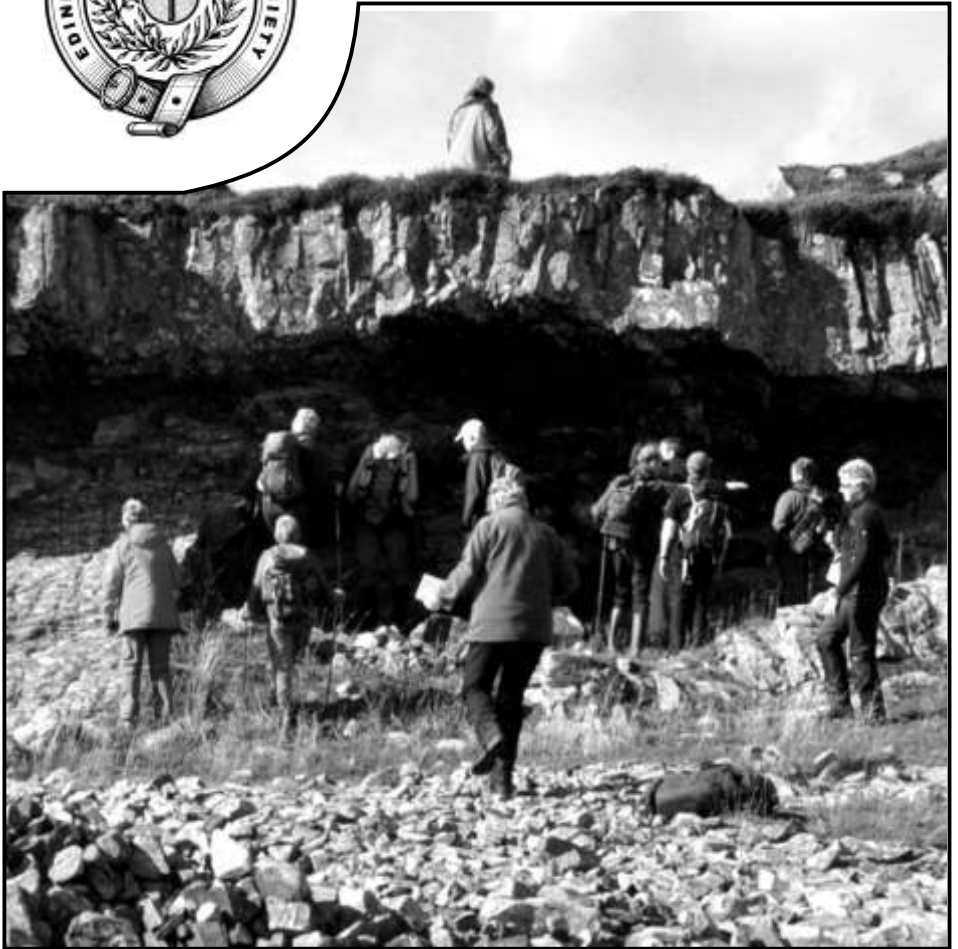


EDINBURGH GEOLOGICAL SOCIETY



Annual Report and Proceedings

179th Session

2012 - 2013

www.edinburghgeolsoc.org

A charity registered in Scotland SC 008011

Edinburgh Geological Society
Report of Council for the Year Ended 30th September 2013

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Members of the Society examining a stream section on the River Caldew during the Long Excursion to Cumbria. © Beverly Bergman

Cover picture: Members of the Society examine one of the spectacular cone-sheets near Mingary Pier during the 2013 Long Weekend excursion to Ardnamurchan. © Beverly Bergman

Welcome

The Council of the Edinburgh Geological Society takes great pleasure in presenting the Annual Report and Accounts for the year ending 30th September 2013. The Society has had a busy year and has hosted successful and well-supported programmes of lectures and excursions.

Graham Leslie, President

Legal and Administrative Information

Charity Name: Edinburgh Geological Society

Scottish Charity Number: SC 008011

Revenue & Customs No.: CR 30310

Registered Office: None

Official Contact Address: c/o Mr R Morley, Flat 3, 27 Sunbury Street,
Edinburgh EH4 3BU

Council 2013 (Elected 30th January 2013)

President: Graham Leslie

Vice-Presidents: Christine Thompson, Mike Browne

Immediate Past President : Angus Macpherson

Secretary: Beverly Bergman

Treasurer: Bob Morley

Membership Secretary: Andrew Rushworth

Lectures Secretary: Kathryn Goodenough (also Asst Sec (Publications))

Excursions Secretary: Mel Farquarson (joined Council in-year)

Assistant Secretary (Planning & Finance): Lillian D'Mello

Assistant Secretary (Clough/Awards): Rachel Wood

Assistant Secretary (Billet): Fiona McGibbon

Publication Sales Officer: Angus Miller

Librarian & Archivist: Bob McIntosh

Scientific Editors: Rob Duck, Maarten Krabbendam

Ordinary Members: Ken Grant, Richard Smith, Phil Stone, Colin MacFadyen,
Rhona Fraser

Independent Examiner

Julian Cordery of Gibson McKerrell Brown LLP, 14 Rutland Square,
Edinburgh EH1 2BD

Bankers

Bank of Scotland, 1 Liberton Drive, Edinburgh EH16 6NL

Investment Managers

Brewin Dolphin Securities Ltd, 7 Drumsheugh Gdns, Edinburgh EH3 7QH

Solicitors

Simpson & Marwick, Albany House, 58 Albany Street, Edinburgh EH1 3QR

Structure, Governance and Management

Objectives and Activities

The Society was founded in 1834, and its objectives are the stimulation and encouragement of public interest in geology and the advancement of geological knowledge by such means as public lectures, symposia, conferences, the reading and discussion of original papers, excursions, exhibitions, the maintenance of a geological library, the publication of the *Scottish Journal of Geology* jointly with the Geological Society of Glasgow, and the production of any other geological publications which may be considered desirable.

Governing Document

The Society is recognised by the Scottish Charity Regulator and HM Revenue and Customs as a Charity.

Its governing document is the Laws of the Society, as amended by the membership of the Society at Special General Meetings called for the purpose. The members of the Council of the Society act as charity trustees, as defined in the Charities and Trustee Investment (Scotland) Act 2005, in having the general control and management of the administration of the Society. The Laws of the Society were last revised at a Special General Meeting on 2 November 2011.

Recruitment and Appointment of Council

Council is elected at the Annual General Meeting of the Society, held in January each year.

The President and Vice-Presidents each serve on Council for two years, and the President may hold the post of Immediate Past President for up to 2 years on demitting office.

Other office bearers are elected annually, but there is no limit on the number of years for which they may be re-elected.

There are up to six Ordinary Members of Council who are each elected for 3 years.

Trustee Induction and Training

A Trustee Induction Pack is given to all new Council members and prospective members, to ensure that they are aware of their duties under the 2005 Act and understand their legal responsibilities as Trustees of the Society. A training evening for Trustees was held on 27 February 13. Office bearers have generally been members of the Society for several years.

Risk Management

The Society aims to break even financially over short periods of years and Council reviews the financial outlook to help achieve this. The portfolio of investments provides a buffer in case of need.

A risk assessment is carried out for each field excursion, and includes a description of the terrain to be encountered and emphasises particular hazards such as uneven ground, slippery or unstable surfaces or sheer drops. Walking distances and the nature of any ascents or descents are also specified. Information on such hazards, and the level of fitness required by participants, is included in the published excursion programme. The Society's risk management policy was reviewed and revised during the Session.

The Society is insured against third party liability arising from claims resulting from the Society's activities during excursions and site work by Geoconservation Group members. This insurance is provided through the Geologists' Association, to which the Society is affiliated.

Organisational Structure

The Society has a Council of 20 members who are responsible for the strategic direction and policy of the Society. All Council members are voluntary and unpaid. The Society has no paid employees. The Planning and Finance, Publications, Excursions and Grants (The Clough Committee) sub-committees manage particular aspects of the Society's work and report to Council.

Related parties

Lothian and Borders GeoConservation, Tayside Geodiversity and Stirling and Clackmannan RIGS are involved in designating, publicising and helping to maintain Local Geodiversity Sites in their respective areas, and are committees of the Edinburgh Geological Society.

The *Scottish Journal of Geology* is owned jointly by the Edinburgh Geological Society and the Geological Society of Glasgow. Each Society appoints two scientific editors to sit on the board.

The Society is a founding member of the Scottish Geodiversity Forum, which aims to promote Scotland's geodiversity, and seeks to widen the profile of geodiversity and influence national and local policies. The Society is also affiliated to the Geologists' Association.

Achievements and Performance

Overview

The Society had a successful year in pursuing its objectives of the stimulation and encouragement of public interest in geology and the advancement of geological knowledge. The programmes of lectures and excursions were well attended. The Society continued to support the Scottish Geodiversity Forum and the Edinburgh branch of the University of the Third Age. Our affiliated local geoconservation groups continued to be active, with Lothian and Borders GeoConservation publishing a new leaflet and others in preparation.

Council

The Council met 6 times during the year, and maintained an overview of the full range of activities of the Society. Council members continued to work hard at controlling expenditure, and were able to use surplus funds to support several initiatives including a grant of £1,400 to Lothian and Borders GeoConservation to fund leaflet production, and a grant of £100 to support the University of Glasgow's forthcoming book on Scottish Gold which will accompany a major exhibition. The Finance and Planning Committee, under the chairmanship of Lilian D'Mello, considered in detail several issues connected with the smooth running of the Society including the policy for processing requests for grants.

Membership

Total membership fell from 544 to 536. There were 39 new Fellows elected, 5 died, 19 resigned and 23 had their membership suspended as a result of non-payment of 2012-13 subscriptions, underpayment of previous years' subscriptions, or because mail was returned as "gone away". The number of Fellows by membership category as at 30 September 2013 was:

Honorary Fellows	8	Senior Fellows	56
Distinguished Fellows	4	Family Fellows	30
Corresponding Fellows	7	Junior Associates	11
Life Fellows	12	Glasgow Associates	14
Ordinary Fellows	394		
TOTAL	536		

Lectures Programme 2012-2013

The programme, organised by Lectures Secretary Kathryn Goodenough, consisted of 11 meetings. They were enthusiastically received, with good attendances. Fellows' Night and the social evening took place on 12 December 2012 at BGS Murchison House, where the audience enjoyed a selection of short presentations followed by a wine and cheese reception, expertly arranged by John Mendum. The Society does not pay a fee to speakers and is very appreciative of the time and expertise that they give so willingly.

Lectures held during the session were:

2012

- 17 Oct Using accessory minerals to probe the plate tectonic history of the Earth. Craig Storey (University of Portsmouth)
- 31 Oct Geophysics from the edge of Europe's lost world. Richard Bates (University of St Andrews)
- 14 Nov The use of 3D seismic data to investigate the geo-anatomy hidden beneath Scottish offshore waters (Clough Lecture). John Underhill (University of Edinburgh)
- 28 Nov Arthur Holmes, 100 years of Geochronology and the Age of the Earth. Randy Parrish (NERC Isotope Geosciences Laboratory)
- 11 Dec Fellows' Night

2013

- 16 Jan Between a rock and a hard place: How sustainable is critical metal supply? Andrew Bloodworth (British Geological Survey)
- 30 Jan The eve of biomineralisation. Rachel Wood (University of Edinburgh)
- 13 Feb The Geology of the Anthropocene. Simon Price (British Geological Survey)
- 27 Feb Volcanic plume and ash cloud dynamics: implications for ash hazards (The James Wright Memorial Lecture - jointly with the Geological Society of Glasgow) Steve Sparks (University of Bristol)
- 13 Mar Geoarchaeology of the Newgrange World Heritage site, Boyne Valley, Ireland. Ian Meighan
- 27 Mar The impact of climate change on our stone heritage. Ewan Hyslop (Historic Scotland)

Excursions Programme 2013

The programme arranged by Excursions Secretary Mel Farquharson, who assumed the appointment in-year to fill a vacancy, comprised three Saturday, one Sunday and five Wednesday evening excursions (one Saturday excursion was cancelled for reasons outwith the Society's control). It was well attended and all excursions were greatly enjoyed by the participants. The Society does not pay a fee to Leaders and is very appreciative of the time and expertise that they give so willingly. The Excursions were:

- Wed 24 Apr Roslin Glen. Leader: Mike Browne
- Wed 8 May Cramond Island. Leader: Angus Miller
- Sat 24 May Igneous Geology of Ayrshire. Leader: Prof Brian Upton
- Wed 5 Jun Granton shore. Leader: Neil Clarke
- Sat 8 Jun Thornhill, Dumfries & Galloway. Leader: Andrew McMillan
- Wed 19 Jun Blackford Hill. Leaders Mihaela Trelea-Newton & Rob Askew
- Wed 17 Jul Edinburgh South Side. Leader: Andrew McMillan
- Sat 20 Jul Keltie Water & Bracklinn Falls (Joint excursion with the Geological Society of Glasgow). Leaders: Chris Burton & Jim MacDonald
- Sun 27 Oct Glasgow Building Stones & Hunterian Museum. Leaders: Margaret Greene & John Faithfull (rescheduled from 5 Aug)

The Long Excursion to the Lake District in May was ably organised by Anne Burgess and the leaders were Doug Holliday, Dave Millward and Clive Auton.

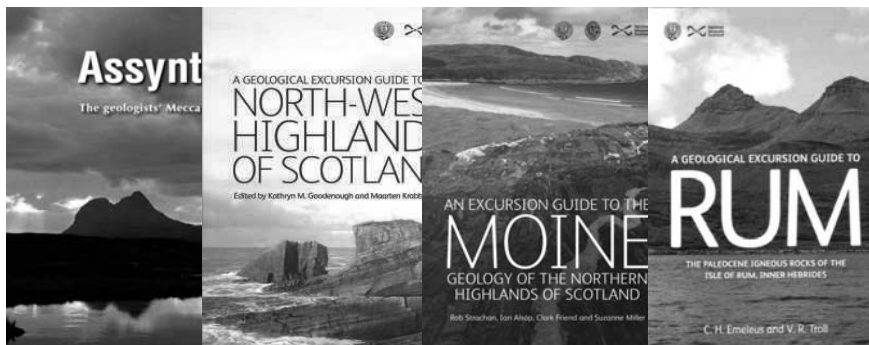
In September 32 members travelled to Ardnamurchan for an excellent long weekend organised by Lilian D'Mello in one of Scotland's classic geological localities, under the enthusiastic leadership of Prof Brian Upton and David Stephenson. We were privileged to have with us Henry Emeleus, one of the authors of the Palaeogene Volcanic Districts of Scotland Regional Guide.

Publications

A revised (2nd) edition of the Assynt Mecca guide was completed and published on our website as a downloadable .pdf file. This has proved popular, being downloaded more than 400 times in one month. The Society is now organising a small print run for sale. Work continued on the Perth & Stirling Guide with the preparation of the illustrations by Angus Miller, who also continued to work hard as Publications Sales Officer. Total sales of publications showed a continued decline, reflecting no recent new publications and a general decrease in demand for excursion guides, despite the better summer weather. The three excursion guides published in association with NMS publishing in recent years continue to sell well, Moine and Rum having sold almost 80% of their original print runs. The North-west Highlands Guide continues to be very popular and is now almost half-way through its second print run with over 1,400 copies sold in 2.5 years.

Members are reminded they can purchase EGS publications at a discount online via our website, card payments are accepted and publication orders can be collected post-free at most lectures.

Two editions of The Edinburgh Geologist, were issued under the editorship of Phil Stone and Bob McIntosh, and Fiona McGibbon edited two Billets, the first having been produced by the Hon Sec during the interregnum. Publication of the Scottish Journal of Geology continued through the Geological Society Publishing House and two full issues were produced, comprising Volume 48, Part 2 and Volume 49, Part 1.



The Clough Medal and Research Grants

The Clough Medal for 2012-2013 was awarded to Professor John Underhill in recognition of his record of research into North Sea stratigraphy, structure (notably rift systems), hydrocarbon reservoirs, and his general contribution to teaching, outreach, industrial impact in Scotland and both Scottish and Westminster Parliamentary bodies.

One fieldwork grant of £500 was awarded from the Clough Fund to Emmanuel Cedillo Villareal, for fieldwork in the Dolomites to support work into Fe redox geochemistry. Brief reports from fieldwork supported by the Society in recent years are posted on our website.

Geoconservation Groups

The Lothian and Borders GeoConservation committee met quarterly and continued its work on the monitoring and designation of Local Geodiversity Sites. The Volunteer Group met monthly during the winter. The long-awaited leaflet on Building Stones of Edinburgh's South Side was completed and published, and the group continued to work with undergraduate geosciences students at Edinburgh University on leaflet outreach projects. The Volunteer Group was involved in several public events including Volcano Fun Day in Holyrood Park and an event at Dirleton Castle, and members of the group led a number of evening walks as part of the Society's Excursions Programme. Mike Browne, chair of Lothian and Borders GeoConservation, was re-elected as Chair of the national body, GeoConservation UK.

Sponsored Projects

The Society continues to support the project to supply free maps and Rock Boxes to schools, to encourage teaching about Scotland's rocks and landscape within the Curriculum for Excellence. Support has also been given to Lothian & Borders GeoConservation to enable publication of additional leaflets.

Acknowledgements

The affairs of the Society are organised entirely by voluntary effort. Members of Council jointly contribute hundreds of hours of time to the running of the Society, much of this in quiet ways behind the scenes. Council is supported by many other people, including lecturers, excursion leaders and organisers. Bob Gatliff, Head of Station, BGS Edinburgh, is thanked for accommodating the Society at Murchison House for lectures and meetings.

Financial Review

The Society's activities were maintained at a similar level to that of previous years. The surplus on revenue account was £5,546 compared with £4,509 in 2011-12 though of this only £3,694 is available for the Society's general use (£3,998 in 2011-12). The balance relates to Restricted Funds (mainly sponsored projects and the Clough and Mykura Funds). The net assets of the Society rose by £11,181 over the year.

Principal Funding Sources

The Society's principal source of income continues to be membership subscriptions and this is supplemented by tax refunds in respect of members who gift aid their subscriptions. Other important sources are sales of the Society's publications and income from the Society's investments, and this year some substantial donations were received. Income from excursions is used to pay for, or at least defray, the costs of the excursions. The Society has also received sponsorship for a number of special projects and some of these monies have yet to be disbursed.

Expenditure

Expenditure continued at a similar level to last year.

Investment Policy

The Society employs Brewin Dolphin Securities Ltd as its investment manager and they have discretion to manage the portfolio on a day-to-day basis without reference to the Society. Their remit is to provide growth with a medium risk profile, while maintaining investment income at about current levels. At present a little over half of the Society's funds are invested in equities, entirely through composite vehicles, with the remainder being in fixed interest securities, mainly corporate bonds.

Reserves Policy

The Society has accumulated reserves of £107,326. 30% of these are Restricted Funds and are set aside for the purposes of those funds. The Society aims to break even financially over short periods of years and as net income / expenditure is small in relation to activities undertaken the remaining reserves provide a most useful buffer against unexpected contingencies, together with valuable investment income.

Plans for Future Periods

The Society plans to continue its core programmes of lectures, excursions and publications. Costs and revenue are always under pressure and require continual care from the Society's Council and Officers. Costs generally continue to rise and the Society seeks to offset this by attracting new members, encouraging the use of Gift Aid and the use of budgetary measures. Production of excursion guides continues and is being paced and costed carefully.

Responsibilities of Council

Council accepts its responsibility for the preparation of financial statements for each financial year which give a true and fair view of the affairs of the Society and of the surplus or deficit for the period. In preparing those financial statements, Council is required to:

- select suitable accounting policies and apply them consistently;
- make judgments and estimates that are reasonable and prudent;
- state whether applicable accounting statements or statements of recommended practice have been followed, subject to any departures disclosed or explained by the financial statements and
- prepare the financial statements on the going - concern basis unless it is inappropriate to assume that the Society will continue in existence.

Council also accepts its responsibility for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Society and enable it to ensure that the financial statements comply with the Charities and Trustees Investment (Scotland) Act 2005 and the Charities Accounts (Scotland) Regulations 2006.

Council is also responsible for safeguarding the assets of the Society and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Independent Examiner

Mr Julian Cordery of Gibson McKerrell Brown LLP continued as Independent Examiner during the year and has expressed his willingness to continue in that capacity.

Approved by the Council of the Edinburgh Geological Society and signed on its behalf by

Graham Leslie, President
11 December 2013

Independent Examiner's report to the Trustees of the Edinburgh Geological Society

I report on the financial statements of the charity for the year ended 30th September 2013, which are set out on pages 15 to 21.

Respective responsibilities of Trustees and Examiner

The charity's trustees are responsible for the preparation of the accounts in accordance with the terms of the Charities and Trustee Investment (Scotland) Act 2005 and the Charities Accounts (Scotland) Regulations 2006. The charity's trustees consider that the audit requirement of Regulation 10(1)(a to c) of the 2006 Regulations does not apply. It is my responsibility to examine the accounts as required under section (44)(1)(c) of the Act and to state whether particular matters have come to my attention.

Basis of Independent Examiner's Statement

My examination is carried out in accordance with Regulation 11 of the 2006 Regulations. An examination includes a review of the accounting records kept by the charity and a comparison of the accounts presented with those records. It also includes consideration of any unusual items or disclosures in the accounts and seeks explanations from the trustees concerning any such matters. The procedures undertaken do not provide all the evidence that would be required in an audit and, consequently, I do not express an audit opinion on the view given by the accounts.

Independent Examiner's Statement

In connection with my examination, no matter has come to my attention:-

1. which gives me reasonable cause to believe that, in any material respect, the requirements:-
 - to keep accounting records in accordance with section 44(1)(a) of the 2005 Act and Regulation 4 of the 2006 Regulations, and
 - to prepare accounts which accord with the accounting records and comply with Regulation 8 of the 2006 Regulationshave not been met, or
2. to which, in my opinion, attention should be drawn in order to enable a proper understanding of the accounts to be reached.

Julian Cordery FCCA ACA
Gibson McKerrell Brown LLP
14 Rutland Square Edinburgh EH1 2BD
11 December 2013

**Statement of Financial Activities including Income and Expenditure Account for
the year ended 30th September 2013**

	Note	Unrestricted Funds - £	Restricted Funds - £	2013 total - £	2012 total - £
<u>Incoming Resources</u>					
Voluntary Income					
Members' Subscriptions		9,535		9,535	9,455
Gift Aid tax refund		1,360	150	1,510	1,771
Donations		2,497		2,497	
Investment income		2,245	793	3,038	2,756
Income from Charitable activities					
Excursions	3	21,978		21,978	14,983
Sponsored projects	8		4,700	4,700	2,050
Fundraising trading:					
Sales of Publications	4	<u>3,535</u>		<u>3,535</u>	<u>4,832</u>
Total Incoming Resources		<u>£41,150</u>	<u>£5,643</u>	<u>£46,793</u>	<u>£35,847</u>
<u>Resources Expended</u>					
Fund management charges					
		<u>480</u>		<u>480</u>	<u>480</u>
Fundraising trading:					
Cost of Sales	4	1,829		1,829	3,077
Illustrations - new Guide		1,920		1,920	-
Charitable activities:					
Lectures		2,430		2,430	2,306
Billet		1,888		1,888	1,763
Edinburgh Geologist		2,460		2,460	2,352
Excursions	3	21,954		21,954	15,046
Grants and Awards		183	634	817	641
Geological leaflets		1,865	1,769	3,634	1,000
Sponsored projects	8		1,388	1,388	2,376
Administration		788		788	892
Total cost of Charitable activities		<u>31,568</u>	<u>3,791</u>	<u>35,359</u>	<u>26,376</u>
Governance costs		<u>1,659</u>		<u>1,659</u>	<u>1,405</u>
Total Resources Expended		<u>£37,456</u>	<u>£3,791</u>	<u>£41,247</u>	<u>£31,338</u>
Net Incoming (Outgoing)					
Resources before other recognised gains / losses					
Net gains on investments	5	£3,694	£1,852	£5,546	£4,509
Net Movement in Funds		<u>£7,858</u>	<u>£3,323</u>	<u>£11,181</u>	<u>£7,321</u>

Continues overleaf

**Statement of Financial Activities including Income and Expenditure Account for
the year ended 30th September 2013 - continued**

<u>Net Movement in Funds</u>	<u>£7,858</u>	<u>£3,323</u>	<u>£11,181</u>	<u>£7,321</u>
Reconciliation of funds				
Total funds brought forward	£67,455	£28,690	£96,145	£88,824
<u>Total funds carried forward</u>	<u>£75,313</u>	<u>£32,013</u>	<u>£107,326</u>	<u>£96,145</u>

The above statement of financial activities includes all gains and losses in the year.
All incoming resources and resources expended derive from continuing activities

Balance Sheet as at 30th September 2013

	Notes	£	2013	£	£	2012	£
Investments	5			75,633			69,829
Current Assets							
Stock of Publications	4	1,289			2,678		
Other Stocks		214			321		
Debtors and prepayments		777			966		
Bank		<u>34,205</u>			<u>29,046</u>		
					<u>33,011</u>		
Creditors							
Creditors and provisions - amounts falling due within one year	6		<u>4,792</u>			<u>6,695</u>	
Net Current Assets				<u>31,693</u>			<u>26,316</u>
Net Assets				<u>£107,326</u>			<u>£96,145</u>
Representing:							
Unrestricted funds							
General Fund	8			75,313			67,455
Restricted funds							
Permanent endowment	8			25,460			23,829
Sponsored projects	8			<u>6,553</u>			<u>4,861</u>
Total funds				<u>£107,326</u>			<u>£96,145</u>

The notes on pages 17 to 21 form part of these accounts.

Approved by Council on and signed on its behalf by

R Morley, Treasurer
11 December 2013

Notes forming part of the Financial Statements

1 Accounting Policies

The principal accounting policies are summarised below. The accounting policies have been carried through consistently throughout the year and in the preceding year.

(a) Basis of Accounting

The accounts have been prepared under the historical cost convention, as modified by the inclusion of investments at market value, and in accordance with the Charities and Trustees Investment (Scotland) Act 2005, the Charities Accounts (Scotland) Regulations (2006) and Statement of Recommended Practice: Accounting and Reporting by Charities (2005).

(b) Fund Accounting

- Unrestricted funds are available for use at the discretion of the trustees in furtherance of the general objectives of the charity.
- Restricted funds are subjected to restrictions on their expenditure imposed by the instructions or will of the donor.

(c) Incoming resources

- Subscriptions are credited in the period to which they relate. No provision is made for arrears.
- Sales of publications are credited in the period to which they relate.
- All other income is credited when received.
- The gross income from investments and bank interest received during the year has been apportioned to the various funds in the ratio of their opening balances, together with net gains (losses) on investments.

(d) Resources expended

Expenditure is recognised on an accrual basis as liability is incurred and includes VAT.

- Charitable expenditure comprises those costs incurred by the charity in the delivery of its activities to its beneficiaries.
- Governance costs comprise those costs associated with meeting the constitutional and statutory requirements of the charity and include the independent examiner's fee (£540) and costs linked to the strategic management of the charity.
- All costs are allocated between the expenditure categories of the Statement of Financial Activities on a basis designed to reflect the use of the resource.

2. GeoConservation Groups

The Lothian and Borders GeoConservation, Stirling and Clackmannan RIGS and Tayside Geodiversity Groups are constituted as committees of the Society, but have their own office-bearers and bank accounts. Their financial results are included in these accounts.

3. Excursions

Particulars of the Society's excursions etc are as follows:-

	2012 / 13		2011 / 12	
	Contributions	Cost	Contributions	Cost
	£	£	£	£
Day Excursions	888	1,200	877	1,235
Weekend Excursion	6,875	6,638	690	429
Long Excursion	14,015	13,900	13,219	13,196
Fellows' night	<u>200</u>	<u>216</u>	<u>197</u>	<u>186</u>
Total	<u>£21,978</u>	<u>£21,954</u>	<u>£14,983</u>	<u>£15,046</u>

4. Publications

Sales and the cost of sales comprise:

	2012/13	2011/12
	£	£
Sales	<u>£3,535</u>	<u>£4,832</u>
Cost of Sales	1,501	2,645
Depreciation	<u>328</u>	<u>432</u>
Total cost of Sales	<u>£1,829</u>	<u>£3,077</u>

Stocks of publications have been valued at the lower of cost and net realisable value after making due allowance for obsolete and slow-moving items. Older stocks have now been fully depreciated and the more recent Rum, Moine and NWH Guides are being written off at the greater of 20% pa or pro rata to Sales.

5. Investments

Analysis of Movements of Investments

	£
Carrying value (market value) at beginning of year	69,829
Add: Additions to Investments at cost	9,530
Less: Disposals at carrying value	-8,806
Add: Net gain on revaluation	5,080
Carrying value (market value) at end of year	<u>£75,633</u>
Note - Net gain realised during the year	554
Gain on revaluation	5,080
Net gain on Investments	<u>£5,634</u>

6. Creditors and Provisions

	2013	2012
	£	£
Loan by Chairman of S&C RIGS Group	2,180	2,180
National Museum of Scotland	-	1,717
Miscellaneous	<u>2,612</u>	<u>2,798</u>
Total	<u>£4,792</u>	<u>£6,695</u>

7. Trustee Remuneration and Related Party Transactions

£1,920 was paid to a Trustee (A Miller) for professional services in connection with the preparation of illustrations for a new Guide and £200 for the enhancement of the Membership database. No other members of Council received any remuneration during the year. Costs incurred in entertaining lecturers after the public lectures (£389) were refunded to 2 members of Council, and other costs totalling £1,123 incurred on behalf of the Society were refunded to 5 members of Council.

No trustee or other person related to the charity had any personal interest in any contract or transaction entered into by the charity during the year.

8. Restricted Funds

Endowment Funds

The purpose of the Clough Memorial Fund is to provide a medal annually to a geologist whose original work has materially increased the knowledge of the geology of Scotland and the North of England, and to award grants for fieldwork. One grant was made from the Clough Fund during the year.

The Mykura Fund is to support fieldwork in Scotland. No grants were made during the year.

Sponsored Projects

The Society sponsors a number of special projects and invites donations specifically to fund them. Current projects are the provision of kits of geological specimen rocks for use as teaching aids in schools, and the production and publication of leaflets describing the geology of locations of geological interest in and around Edinburgh.

Accounting

The gross income from investments and bank interest received during the year, together with net gains (losses) on disposal or revaluation of investments, has been apportioned to the various Endowment funds in the ratio of their opening balances.

The assets of the Society have been apportioned to the various Endowment funds in the ratio of their closing balances.

The Sponsored Projects funds carried forward are held in cash.

Restricted Funds - continued

	Unrestricted Funds	Endowment Funds Clough	Mykura	Sponsored Projects	Total
	£	£	£	£	£
Investment Income	£ 2,245	£ 601	£ 192		£ 3,038
Gift Aid	£ 1,360			£ 150	£ 1,510
Sponsored Projects				£ 4,700	£ 4,700
Other incoming resources	£ 37,545				£ 37,545
Total incoming resources	<u>£ 41,150</u>	<u>£ 601</u>	<u>£ 192</u>	<u>£ 4,850</u>	<u>£ 46,793</u>
Grants and Awards	£ 183	£ 634			£ 817
Sponsored Projects	£ 1,865			£ 3,157	£ 5,022
Other outgoing resources	£ 35,408				£ 35,408
Total outgoing resources	<u>£ 37,456</u>	<u>£ 634</u>	<u>£ -</u>	<u>£ 3,157</u>	<u>£ 41,247</u>
Gain on investments	£ 4,164	£ 1,115	£ 356		£ 5,635
Net movement in Funds	<u>£ 7,858</u>	<u>£ 1,082</u>	<u>£ 548</u>	<u>£ 1,693</u>	<u>£ 11,181</u>
Funds brought forward	£ 67,455	£18,067	£ 5,762	£ 4,861	£ 96,145
Funds carried forward	<u>£ 75,313</u>	<u>£19,149</u>	<u>£ 6,310</u>	<u>£ 6,554</u>	<u>£107,326</u>
represented by:					
Investments	£ 56,524	£14,373	£ 4,736	£ -	£ 75,633
Current assets less - Current liabilities	£ 23,581	£ 4,776	£ 1,574	£ 6,554	£ 36,485
	-£ 4,792				-£ 4,792
Net assets	<u>£ 75,313</u>	<u>£19,149</u>	<u>£ 6,310</u>	<u>£ 6,554</u>	<u>£107,326</u>

Obituaries (compiled by Ian Jackson)

During the year we recorded with the greatest regret the deaths of Ordinary Fellows, Professor Neil Hudson, Mr Sinclair Ross and Dr Martin Whyte, of Senior Fellows, Professor Barry Dawson and Mr John Tether, and of Glasgow Associate, Mr Murray Paterson.

John Barry Dawson, field geologist and volcanologist, mineralogist and geochemist, Emeritus Professor of Geology at the University of Edinburgh, and the Society's Clough Medallist in 1989, was pre-eminent in many fields during a long and distinguished career of research into E and S African geology. Born near Leeds on 19th June 1932, he obtained both his BSc (Geology, 1957) and PhD (1960) from the University of Leeds, the latter degree for his field studies (1957-8) of the kimberlites of Basutoland (now Lesotho). From 1960-1962, he spent two formative years working for the Tanganyika Geological Survey which included mapping the bizarre alkali volcano, Ol Doinyo Lengai.

Those five years of African field work (coupled with his legendary rock collection!) provided the twin themes – kimberlites and carbonatites – that sustained his research for the next 50 years. In his kimberlite and xenolith investigations, often in conjunction with Joe Smith at the University of Chicago, with whom he collaborated for 32 years, Barry made the first discovery of diamond in garnet lherzolite nodules (1975), differentiated a new mineralogical suite (the MARID suite) of mantle xenoliths in kimberlites (1977), proposed a new meteorite-impact theory for the origin of carbonados (1985), and in later years used microprobe trace element and gas isotope analysis of peridotite xenoliths from S African kimberlites to investigate mantle metasomatism. His highly regarded monograph, *Kimberlites and their Xenoliths*, was published in 1980.

He was fortunate to witness the 1960 Ol Doinyo Lengai eruption of low temperature and low viscosity sodium carbonate lavas (natrocarbonatite), and thus was the first geologist ever to analyse recently erupted carbonatite lavas. Barry kept a vigilant watch on the volcano's activity, publishing accounts of the contrasting 1966, June 1993 (viscous lavas) and September 2007 (ash) eruptions, as well as

leading an expedition of invited petrology students to record the November 1988 eruption; he also documented the immiscibility of co-existing silicate and carbonatite magmas at Ol Doinyo Lengai. Other fruitful topics were the carbonatite tuffs and entrained mantle-derived peridotite xenoliths of the Lashaine volcano in N Tanzania whose analysis he used to prove mantle metasomatism, and regional studies of the relationship between present-day volcanism, and the Neogene structure of the Gregory Rift and its Archaean antecedents.

His academic career had begun in 1962 when he obtained a post-doctoral fellowship at Dalhousie University, Halifax, Canada. He returned to the UK in 1964 (and joined the Society in that year) to a lectureship at the University of St Andrews, becoming Reader in 1974 and Personal Professor (1975) in the Department of Geology; in 1972 he was both awarded a DSc by St Andrews and elected a Fellow of the Royal Society of Edinburgh. He then progressed to the University of Sheffield where he was Sorby Professor of Geology (1978-1989), before his final move to the University of Edinburgh as Professor of Geology from 1989 until retirement in 1997. Barry served on the editorial committee of the *Scottish Journal of Geology* (1969-1971), and the editorial board of the *Transactions of the Royal Society of Edinburgh* (1976-1984 and 1990-1992), later as Chairman (1993-1996). In 2012 he was only the third recipient of the Collins Medal of the Mineralogical Society.

Barry published almost 200 papers and books in his lifetime and the flow continued unabated in his active retirement as Emeritus. The culmination of his lifelong research into the Gregory Rift System of E Africa was his sole authorship in 2008 of the Geological Society of London Memoir 33. He was a keen cricket follower and hillwalker - he had bagged many Munros especially in the Western Highlands. He transferred to Senior Fellow in the 2006-7 session, and died in Edinburgh on 2nd February 2013, aged 80. The most comprehensive published obituary, among many, is that by Simon Harley and Godfrey Fitton (to whom grateful thanks) on www.rse.org.uk/614_ObituariesD.

Neil Frederick Charles Hudson, metamorphic petrologist, structural geologist and Emeritus Professor at the University of Derby, died at

Ashbourne, Derbyshire on 11th November, 2012, aged 65. Born in 1947 in Edinburgh, he attended the Royal High School before gaining both his first degree (Geology, 1970) and PhD (1975) at the University of Edinburgh. The various silicate minerals developed in Dalradian pelites under the low pressure/high temperature Buchan-type regional metamorphism of NE Scotland provided the topic for his PhD, with Ben Harte as supervisor; through his lifelong pursuit of this complex subject, he became the leading authority on the deformational history and P-T constraints during metamorphism of Dalradian rocks in NE Scotland.

In 1975, the year in which he joined the Society, he moved to Allestree, Derby (and later to Ashbourne) to take up a teaching post at Derby College (now University of Derby), where he stayed for the remainder of his career. In the following decade, he widened his PhD studies to cover E Scotland, recognizing additional variants of the traditional Dalradian metamorphic domains and estimating the overburden depths and uplift rates for the Dalradian. After 1989 and particularly following the granting of university status to Derby in 1992, he directed his research students to focus on specific aspects of the Buchan metamorphism, such as the diagenetic and metamorphic history of the calc-silicate rocks, and partial melting and local migmatization of Dalradian pelites. Other joint publications with research students at Derby in the late 1990s, on the genesis and deformational history of the New Harbour Group in the Mona Complex of Holy Island, Anglesey, arose from discoveries while running undergraduate field courses.

In 2001, he became Professor of Metamorphic Petrology at Derby, taking early retirement in 2008 to follow research interests with others, not only on the Dalradian (the Portsoy Gabbro and the role of the Portsoy Shear Zone in delineating metamorphic zones in the Dalradian), but also on new ventures in the earth's mantle, such as mineral petrogenesis in the Transition Zone, and silica-rich minerals in diamond inclusions. Outside geology, Neil played both the guitar and harp, and also enjoyed walking on the Derbyshire and, on frequent return visits, Scottish hills. A much longer tribute by Ben Harte and Stuart Kearns, to whom many thanks, can be found in the *Mineralogical Magazine*, 77, pp.2883-5. 2883-5.

Murray Gordon Paterson of North Kessock, Inverness joined the Society as a Glasgow Associate in the 1999-2000 session, after retiring as a Lecturer in Economics from Inverness College in 1996. He was a staunch supporter of the Highland Geological Society, serving as Secretary from 2001 to 2006 and

then as a committee member until 2010. He died in Inverness on April 15th 2013, aged 72; further biographical details can be found (in the June 2013 HGS newsletter) at www.spanglefish.com/highlandgeologicalsociety.

Although based in Forres, **Sinclair Mowat Ross** played a very active role in the programme of longer Society excursions in the late 1980s and 1990s; he was a regular attendee on the Long Excursion, and was leader or co-leader of four long excursions and four weekend excursions, sometimes in consecutive years and ranging geographically from the Black Isle through Assynt to Mull. Self-taught in geology, he was nevertheless very well versed in the igneous and metamorphic geology of N and W Scotland (and also overseas, e.g. the Canary Islands).

An Orcadian by birth, he saw active service in WWII as a pilot with the RAF, joining up on his 17th birthday. After the war, he trained as a meteorologist with the Met. Office in Bracknell where, *inter alia*, he undertook research with the climatologist (later Professor) HH Lamb. He moved to Forres in 1962, preparing detailed Met Office weather forecasts for RAF Kinloss. Like many others, Sinclair's interest in geology stemmed from Arthur Holmes' *Principles of Physical Geology* when, in the late 1950s he was given the library copy during the closure of an RAF base in N Germany at which he was temporarily stationed; while there, he had been fascinated by the figures of thin sections in Holmes.

Later, on joining the Geological Society of Glasgow, he struck up a close friendship with Alex Herriot who also shared Sinclair's passion for igneous and metamorphic rocks and the cutting of thin sections. Under Herriot's guidance, Sinclair became similarly gifted at preparing thin sections in his home workshop. He joined our Society as a Glasgow Associate in the 1984-85 session, changing to Ordinary Member in 2000 shortly after Herriot's death. He was also a stalwart of the Highland Geological Club (later Society) from its earliest days, becoming President of the Society in 1986, a position he held with deep commitment until the time of his death.

Although he professed to have little interest in soft rocks ("mere gardening"), this was merely a front to disarm specialists, because Sinclair also immersed himself in all aspects of the local Devonian and Permo-Triassic successions, including the vertebrate fauna and trace fossils. Another attraction was geomorphology, especially where the landscape has been re-shaped by

extreme weather events, such as coastal storms and inland floods. In 1992 he published a book - *The Culbin Sands - Fact and Fiction* - in which he challenged the consensus view of the size and fertility of the Culbin estate during its demise and eventual burial by 17th century sandstorms. Fittingly, at the opening of new tourist facilities at Culbin Forest in 2008, he was presented with a specially engraved stone in recognition of his promotion of the area's history and geomorphology over many years.

For several conferences hosted by the Elgin Museum, where Sinclair was Honorary Curator in the late 1980s, he produced syntheses of the geology of Moray for the published proceedings. He compiled most of the pen portrait biographies in the 1996 Society publication - *Assynt the geologist's Mecca* - as well as the additional biographical text of the recently published 2nd edition. He died aged 87 at Forres on 19th September, 2013. My thanks to Christine Thompson, Sheila Ford, and particularly to Peter Christie for his obituary on www.spanglefish.com/highlandgeologicalsociety.

John Tether of Portlethen, Aberdeen joined the Society as an Ordinary Member in 1980 while employed by the Zambia Geological Survey, based in Lusaka. He spent most of his career in Africa, initially attached to the Uganda Geological Survey in Entebbe in the late 1960s and 1970s, when he worked alongside staff seconded from the Institute of Geological Sciences in London, exploring and geochemically sampling carbonatite complexes in E Uganda. Later in the 1970s, he moved to Zambia, rising to Deputy Director of the Survey in the late 1980s, and in which capacity he published an authoritative review of the agricultural mineral resources of Zambia (1991). In the late 1990s, he moved to a posting in Luxembourg, returning to Scotland early in the Millennium. In retirement, he was a highly respected local councillor for Portlethen District Community Council. He transferred to Senior Fellow in 2006 and died at Aberdeen aged 70, on 29th March, 2013.

Martin Andrew Whyte, an authority on dinosaur track impressions, was born in Edinburgh on 27th March 1945, but spent his primary school years at Oban, where beachcombing stimulated an early interest in natural history and subsequently, in palaeoecology. Secondary schooling, consequential on family moves, was at Daniel Stewart's College in

Edinburgh and then Madras College, St Andrews (1957-1963). He graduated from the University of St Andrews (BSc, Geology) in the same year (1967) as joining the Society, and in 1973 was awarded his PhD from the University of Edinburgh for his palaeoecological investigation of Upper Viséan marine mudstones near Dunbar. He moved to the Department of Geology at the University of Hull in 1971 as a Research Assistant, becoming a Research Fellow two years later. Martin was appointed Lecturer in the Department of Geology at the University of Sheffield in 1974, and Senior Lecturer in 1997; published research continued apace after his retirement in 2010.

In company with his co-worker for many years, Mike Romano, he discovered important arthropod trace fossils and dinosaur tracks in the Middle Jurassic of the Yorkshire coast, beginning in 1987 with the description of a new xiphosurid (limulid) trace fossil, (*Selenichnites*) - the first xiphosurid trace to be found in the UK Jurassic. A diverse mix of sauropod, ornithopod, theropod and rare stegosaur footprints and trackways (together with crocodile and turtle swimming traces) was collected over the next 25 years, including finds by recruited volunteers, and this enabled a dinosaur-dominated coastal plain community to be reconstructed, such that the area is now recognized as a globally important Middle Jurassic track site. Martin was co-founder of the laboratory research group later set up at Sheffield to analyse dinosaur footprint impressions and simulated locomotion across contrasting sand substrates.

Martin maintained an abiding interest in the Scottish Lower Carboniferous, with individual early studies on Upper Brigantian rocks in Strathclyde, and on the palaeoenvironments of Brigantian freshwater limestones; he described the Midland Valley sites for the Lower Carboniferous volume of the Nature Conservancy Geological Conservation Review Series (published in 2004). In 2005 on the Fife coast, he discovered the world's second largest invertebrate trackway (made by the eurypterid, *Hibbertopterus*) in a Strathclyde Group sandstone. He served on the councils of The Geologists' Association (1997-2001) and the Yorkshire Geological Society; in the latter case most notably as Secretary (1988-89) and President (2007-9), and he was a YGS council member at the time of his death in Sheffield on 25th June 2013. For a more complete obituary by Mike Romano, to whom many thanks, visit geolsoc.org.uk/obituaries.

